

## Yvann LE FAY

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### EDUCATION

<b>École Normale Supérieure Paris-Saclay</b> <i>M.Sc. in Applied Mathematics and Machine Learning, MVA</i> <ul style="list-style-type: none"><li>Computational optimal transport, learning for time series, probabilistic graphical models, deep reinforcement learning, generative models, bayesian machine learning</li></ul>	Orsay, France 2023 - 2024
<b>ENSAE</b> <i>M.Eng. in Statistics and Financial Mathematics</i> <ul style="list-style-type: none"><li>Copulas and financial applications, pricing and hedging of derivatives, hidden Markov models and SMC methods, algorithmic trading, advanced statistics</li></ul>	Palaiseau, France 2020 - 2024
<b>Paris-Saclay University</b> <i>B.Sc. in Fundamental Mathematics</i>	Orsay, France 2020 - 2021
<b>Lycée Henri-IV</b> <i>Program in math, computer science and physics leading to nationwide entrance examinations to the Grandes Écoles</i>	Paris, France 2018 - 2020

### EXPERIENCE

<b>Aalto University - Simo Särkkä's group</b> <i>Research internship, supervised by Adrien Corenflos</i> <ul style="list-style-type: none"><li>Proposed the first probabilistic numerics solver for SDEs in the additive-noise setting using Gaussian filtering methods. Preprint version: . Published version: .</li><li>Companion-code of the article (JAX): <a href="https://github.com/hallelujahylefay/bayesianSDEsolver">github.com/hallelujahylefay/bayesianSDEsolver</a>.</li></ul>	Espoo, Finland May 2023 - Sep. 2023
<b>INRIA - MIND</b> <i>Research internship, supervised by Demian Wassermann</i> <ul style="list-style-type: none"><li>Worked on variational inference methods.</li></ul>	Palaiseau, France Jan. 2023 - Mar. 2023
<b>Lombard Odier Investment Managers' - Multi-Asset</b> <i>Off-cycle internship as a quantitative researcher, supervised by Serge Tabachnik</i> <ul style="list-style-type: none"><li>Contributed to a proprietary scalable and highly modular framework for backtesting cross-asset trading strategies. Researched, implemented and backtested strategies (ARPs, Vol, Momentum). Implemented data mining procedures and modern regression methods. Contributed to a statistics and reporting library. Received a renewal offer.</li></ul>	Geneva, Switzerland Jun. 2022 - Nov. 2022
<b>Société Générale (CDN, Retail Banking)</b> <i>Internship in data science and risk analysis, supervised by Pierre Bouché</i> <ul style="list-style-type: none"><li>Backtested a credit decision tool, detected outliers in audit logs. Conducted a study on omnichannel customer behaviours as part of the fusion between Société Générale and Crédit du Nord.</li></ul>	Paris, France Jun. 2021 - Aug. 2021

### AWARDS

<b>Regional math olympiads</b> <i><a href="https://euler.ac-versailles.fr/IMG/pdf/olympiades_equipe_2016-palmares.pdf">euler.ac-versailles.fr/IMG/pdf/olympiades_equipe_2016-palmares.pdf</a></i> <ul style="list-style-type: none"><li>Rank 26<sup>th</sup>/1640.</li></ul>	2016
<b>Hall of fame - Microsoft Security Response Center</b> <i><a href="https://msrc.microsoft.com/update-guide/acknowledgement/archive">msrc.microsoft.com/update-guide/acknowledgement/archive</a></i> <ul style="list-style-type: none"><li>Three times acknowledged for having reported security vulnerabilities.</li></ul>	2015

### PROGRAMMING SKILLS

**Languages:** Python, Ocaml, Wolfram Language, SQL  
**Environments:** Git, Linux, Bloomberg, Excel  
**Libraries and others:** JAX, PySpark, Dask, blp

### OTHERS

**Languages:** French, English  
**Citizenships:** French, Swiss